Amendments to the Claims

1. (Currently amended) For use with a search engine that processes user queries, a

system that locates documents containing words corresponding to a user query

comprising:

an infrequent word identifier that identifies infrequent words that occur

in less than a threshold number of documents, an infrequent word being a word

queried less often than a frequent word;

a frequent word index that maps the location of documents that contain

words that occur in more than the threshold number of documents;

an infrequent word index, maintained separately from the frequent word

index, that maps the location of documents that contain the infrequent words;

and

an index scanning component that, in response to a query containing an

infrequent word, scans the infrequent word index to find the location of

documents containing the infrequent word.

2. (Original) The system of claim 1 wherein the frequent word index is stored by

document.

3. (Original) The system of claim 1 wherein the frequent word index is partitioned

by document.

4. (Original) The system of claim 3 wherein the frequent word index is distributed

across multiple computing systems.

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5. (Original) The system of claim 1 wherein the infrequent word index is stored by

document.

6. (Original) The system of claim 1 wherein the infrequent word index is partitioned

by document.

7. (Previously Presented) The system of claim 6 wherein the infrequent word index

is distributed across multiple computing systems.

8. (Original) The system of claim 1 wherein the infrequent word index is stored by

word.

9. (Original) The system of claim 1 wherein the infrequent word index is partitioned

by word.

10. (Previously Presented) The system of claim 9 wherein the infrequent word index

is stored on a single computing system.

11. (Original) The system of claim 10 wherein the index scanning component, in

response to a user query containing an infrequent word, retrieves document

locations for documents having the infrequent word from the infrequent word

index and transmits the retrieved document locations to computer systems

containing frequent word indexes for the retrieved documents.

12. (Previously Presented) The system of claim 1 further comprising an index cache

associated with the infrequent word index that stores document locations for

recently queried infrequent words.

13. (Currently amended) For use with a search engine that processes user queries, a

method that searches a set of documents for documents containing terms found

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in a user query comprising:

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scanning the set of documents and gathering infrequent words that occur
fewer times than a threshold number in the set of documents—an infrequent

word being a word gueried less often than a frequent word;

constructing an infrequent word index that maps the infrequent words to

locations of documents that contain the infrequent words:

constructing a frequent word index, separately maintained from the

infrequent word index, that maps frequent word that occur in a number of

documents of the set of documents that is greater than the threshold amount to

locations of documents that contain the frequent words;

examining the terms in the user query to identify infrequent words; and

searching the infrequent word index for the identified infrequent words.

14. (Previously Presented) The method of claim 13 further comprising storing the

infrequent word index in a dedicated computer system.

15. (Previously Presented) The method of claim 13 further comprising storing the

infrequent word index in dedicated partitions on computer systems that store

the frequent word index.

16. (Previously Presented) The method of claim 13 further comprising storing the

infrequent word index by word.

17. (Previously Presented) The method of claim 13 further comprising storing the $\,$

infrequent word index by document.

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18. (Previously Presented) A computer readable storage medium comprising

 $computer-executable\ instructions\ that,\ when\ implemented,\ perform\ the\ method$

of claim 13.

 (Currently amended) For use with a search engine that processes user queries, a computer readable medium comprising computer-executable instructions that,

when implemented, perform a method comprising:

identifying infrequent words that occur in less than a threshold number

of documents an infrequent word being a word queried less often than a

frequent-word:

mapping, in a frequent word index, the location of documents that

contain frequent words that occur in more than the threshold number of

documents;

maintaining, separately from the frequent word index, an infrequent word

index that maps the location of documents that contain the infrequent words;

and

in response to a query containing an infrequent word, scanning the

infrequent word index to find the location of documents containing the

infrequent word.

20. (Original) The computer readable medium of claim 19 wherein the infrequent

word index is stored by document.

21. (Original) The computer readable medium of claim 19 wherein the infrequent $\frac{1}{2}$

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word index is partitioned by document.

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22. (Previously Presented) The computer readable medium of claim 19 wherein the

infrequent word index is distributed across multiple computing systems.

23. (Previously Presented) The computer readable medium of claim 19 wherein the

infrequent word index is stored by word.

24. (Original) The computer readable medium of claim 19 wherein the infrequent

word index is partitioned by word.

25. (Previously Presented) The computer readable medium of claim 19 wherein the

infrequent word index is stored on a single computing system.

26. (Previously Presented) The computer readable medium of claim 19 further

comprising creating an index cache associated with the infrequent word index

that stores document locations for recently queried infrequent words.

27. (Currently amended) For use with a search engine that processes user queries, an

apparatus for searching set of documents for documents containing terms found

in a user query comprising:

means for scanning the set of documents and gathering infrequent words

that occur a number of times that is less than a threshold amount in a number of

documents, an infrequent word being a word queried less often than a frequent

word:

means for constructing an infrequent word index that maps the

infrequent words to locations of documents that contain the infrequent word;

means for constructing a frequent word index, separately maintained

from the infrequent word index, that maps frequent words that occur in a

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number of documents that is greater than the threshold amount to location of documents that contain the frequent word;

means for examining the terms in the user query to identify infrequent words: and

means for searching the infrequent word index for the identified infrequent words.